

## PRELIMINARY AND SHORT REPORT

### TREATMENT OF CHRONIC DISCOID LUPUS ERYTHEMATOSUS WITH LARGE DOSES OF VITAMIN B<sub>12</sub>\*

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In a preliminary report Goldblatt (1) reported the intramuscular use of vitamin B<sub>12</sub> in the treatment of 3 cases of chronic discoid lupus erythematosus and 1 case of subacute lupus erythematosus. Using dosages of 15 micrograms weekly he obtained clearing in 1 case of chronic discoid lupus erythematosus after 8 injections. The other 2 cases showed good response but not as good as in the first case. The subacute case improved after 2 months therapy with 15 micrograms given 3 times weekly. Goldblatt recommended further investigation with larger doses of vitamin B<sub>12</sub>. Recently Kopfler (2) treated 2 cases of chronic discoid lupus erythematosus of the scalp with 1000 micrograms of vitamin B<sub>12</sub> twice weekly and stated there was a regrowth of hair in the areas of alopecia after 4 weeks of treatment. Schoch (3) commented editorially that in 1 case of subacute lupus erythematosus 500 micrograms 3 times weekly produced apparent improvement after 50 micrograms 3 times weekly had caused no change.

Preliminary trial in 3 cases of discoid lupus erythematosus with dosages of 30 micrograms 3 times weekly did not produce any demonstrable change in a period of 4 to 8 weeks. Therefore in June of 1952 doses of 1000 micrograms 3 times weekly were instituted.† The series was terminated in February, 1953. The 17 cases were of the chronic discoid type and were selected from clinic and private sources. Fourteen had received previous treatment and 3 had had no previous treatment. Some had shown poor therapeutic response previously while others had responded favorably to the standard agents. In 12 cases the diagnosis had been confirmed by biopsy. It was not always possible to keep the patients on regular treatment. The average number of visits was 2.2 per week. The shortest duration of therapy was 4 weeks, the longest 32 weeks.

The injections of vitamin B<sub>12</sub> were given intramuscularly and were almost painless. There were no local or systemic reactions. Most of the patients stated that they had a feeling of well-being and that they had increased energy.

#### RESULTS

The results are summarized in Table I. The number of cases was too small for statistical analysis and in lieu of controls the results were compared to those obtained by treatment with gold, bismuth, sodium para-amino benzoic acid and other agents.

The response to vitamin B<sub>12</sub> injections was variable, and as a whole disappointing. One case cleared almost completely, 2 were much improved and 2 were slightly improved. Nine cases showed no change and in 3 cases the condition became worse and necessitated a change of treatment.

#### SUMMARY

Seventeen cases of chronic discoid lupus erythematosus were treated with vitamin B<sub>12</sub> in doses of 1000 micrograms 3 times weekly.

The treatment was painless and without side reactions.

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\* Studies, Observations and Reports from the Barnard Free Skin and Cancer Hospital, The St. Louis County Hospital and the Division of Dermatology, Department of Medicine, School of Medicine, Washington University, St. Louis, Missouri.

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TABLE I  
*Chronic discoid lupus erythematosus treated with vitamin B 12*

CASE NO. AND INITIALS	AGE	SEX	DURATION IN YEARS	DISTRIBUTION	PREVIOUS TREATMENT	DURATION OF THERAPY IN WEEKS	TOTAL DOSAGE MICROGRAMS	RESULTS
1. P. S.	30	F	5/6	Face	B, G, L, B 12	11	33,000	Worse
2. W. S.	27	M	2 1/4	Face	None	9	24,000	Cleared
3. E. C.	38	M	1	Face, ears	G	10	25,000	Slight improvement
4. G. L.	31	F	2	Face	B	12	36,000	Slight improvement
5. B. S.	24	F	2 1/4	Scalp	B, G, I	16	48,000	No change
6. J. C.	52	M	1/4	Face	None	8	24,000	No change
7. V. F.	40	F	5	Face	L, P, C	8	24,000	No change
8. D. K. I*	28	F	8	Face, scalp	L, G, B, E, P	32	96,000	No change
9. D. K. II*	28	F	8	Face, scalp	L, G, B, E, P	32	96,000	No change
10. A. J.	41	F	1	Forehead, nose, cheeks, chin	B, A, G, L	10	24,000	Worse
11. J. H.	63	M	18	Face, ears, neck, arms	B, Bi, G, T, L, M, S, P, E, Pa, A, C	16	28,000	No change
12. M. S.	58	F	1/6	Nose, eyebrow	None	7	6,000	No change
13. L. G.	43	F	2 1/2	Face, chest, back	L, G, I	4	12,000	Worse
14. M. W.	47	F	3 3/8	Forehead, neck	G, B, A	31	63,000	Much improved
15. J. S.	29	M	7	Left temple	G	31	78,000	No change
16. A. L.	37	F	3 1/2	Scalp	L, B	15	25,000	Much improved
17. S. K.	16	F	11	Face	B, L, G	19	48,000	No change

\* Identical twins.

A: ACTH; B: Bismuth; B 12: Vit. B 12, 60 mc. 3/wk.; Bi: Bismarsen; C: Cortisone; E: Vit. E; G: Gold; I: Iodides; L: Liver; M: Mapharsen; P: PABA; Pa: Panthenol; S: Sulfonamides; T: Typhoid vaccine.

Response to therapy was inconstant. Most cases showed no change. Three showed very favorable response and some showed slight improvement.

The results were inferior to those obtained with gold and bismuth salts.

Vitamin B<sub>12</sub> therapy has been discontinued for routine use.

#### REFERENCES

1. GOLDBLATT, S.: Treatment of lupus erythematosus with vitamin B 12. Preliminary report of 4 cases, J. Invest. Dermat. 17: 303, 1951.
2. KOPFLER, M.: Communication, Current News in Dermatology and Syphilology, The Schoch Letter, March, 1953.
3. SCHOCH, A. G.: Ibid.